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Beethoven's Deafness

BY

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BEETHOVEN'S DEAFNESS.

By MAURICE SORSBY, London.

THE deafness of Beethoven has all the elements of Greek tragedy. The titanic forces in opposition are there, and the inevitable and relentless chaining of Prometheus. The world's supreme moulder of mighty harmonies is struggling against imprisonment in a world devoid of all sound. The struggle is long and bitter: it stretches over a period of more than twenty years. It wrings moving and pitiable cries of despair from one whose genius was the spirit and interpreter of revolt. For the enchained Prometheus suffers and hopes; even till hope creates out of its own wreck, the thing it contemplates. When at length Beethoven walked in eternal silence, there came to him the mightiest of all cataracts of sound; it could hardly have mattered to him that he missed the noise of the street and the clamour of the market, for had not the gods given him to hear and to hand down the Ninth Symphony?

More than a century has passed since Beethoven died, but his inner life is so well known and so well-documented, that it is to-day possible to diagnose his illnesses with more certainty than could his own medical advisers. The sources of information are mainly those autobiographical notes contained in his letters, and also the evidence from the post-mortem examinations carried out two days after his death.

1. The Evolution of Beethoven's Deafness.

The age at which Beethoven first felt his oncoming deafness is not definitely known; nor is it quite definitely

established that he became totally deaf, though there is no doubt that the deafness was complete for all practical purposes. At the age of 31, in 1801, Beethoven could still successfully hide his deafness from people, but by 1814 his hardness of hearing had advanced to such a degree that conversation became impossible; contemporary records say that he was "stone-deaf" in 1819, eight years before his death, yet there is some evidence that in 1825 or 1826 Beethoven did hear a loud cry.

The first reference to his deafness is contained in a letter, dated 29th June 1801, written to his friend Wegeler[2]; he speaks of failing hearing for the past three years, and though treatment has improved his general condition, the noises in the ears ("sausen und brausen") are ever present. "I may say that I lead a miserable life. For two years now I avoid all society for I cannot say to people 'I am deaf.' In another calling such a course might be possible, but in mine it creates a terrible situation. . . . That you might have some idea of this strange deafness, I must tell you that at the theatre I must sit quite near the orchestra in order to follow the actors. . . . It is surprising that in conversation there are people who have not noticed it (the deafness)." In a letter written at about the same time to the Pastor Amenda,[2] similar information is to be found. ". . . my hearing has become much weaker. Already at the time when you were with me, I felt the symptoms coming on and I kept them secret; since then it has become much worse." That the symptoms of deafness, more manifest in 1801, had been developing for some years is also supported by the Fischhoff manuscript quoted in Thayer's classic *Life of Beethoven*[1]; according to this document Beethoven's deafness began during the convalescence which followed on a "severe illness" contracted in 1796 as the result of a chill. There is no evidence of any hardness of hearing before the age of 26 or 28 and, apparently, it did not become marked to any extent till about the age of 31. Another letter to Wegeler,[2] written five months after the one already quoted (16th November 1801), shows Beethoven's pre-occupation with his ear trouble. A certain surgeon, Vering, had been treating him by blistering his arms; the noises in the ears had diminished, but hearing had not improved. "I dare not think whether it has become worse." He is inclined to try Schmidt. "Marvels are being told of galvanism: what do you think of

it? A physician has told me that he saw a deaf-mute child recover its hearing, and a man, deaf for seven years, also cured. You can hardly imagine what a sad and solitary life I have been leading these last two years. My infirmity is always before me, like a spectre, and I flee from men. I must appear a misanthrope, the very thing I am not."

Things must have been going from bad to worse in those years, 1800-1802. Frantic hope and despair alternate: he runs from one doctor to another, and at the height of a fit of despair, whilst undergoing treatment at Heiligenstadt, he writes a will "to be read and executed after my death." It is a document written in red-hot rage against his fate. He had ceased to hope. "It is a cry of revolt and of heart-rendering pain; one cannot hear it but be shaken with pity. He is ready to end his life; only his moral rectitude keeps him back" (Romain Rolland[10]).

Apparently, his deafness must have been progressing but it could not have been very severe even at this stage. It was to this year, 1802, that the observation of Ries refers to Ries[3] relates that when walking with Beethoven he drew the master's attention to the playing of a flute by a shepherd. Beethoven could not hear it, and became very gloomy. It is probably of this event that Beethoven speaks in his will. ". . . But what a humiliation it is, when having some one near me who hears a flute in the distance, and I hear nothing; or that he should hear the shepherd sing, and I hear nothing."

This period of depression passed into one of apparent tranquillity. No reference is found to the state of his ears during the subsequent years, until 1810, when he writes again to Wegeler[2]: ". . . I would be happy, perhaps the happiest of men, if the demon had not pitched his tent in my ears." To this same year belongs a letter (addressed to Bettina Brentano), according to which it would appear that Beethoven had to resort to having remarks addressed to him written down; but this letter is in all probability a forgery,[16, 26] all the evidence pointing that it was not till 1814 that Beethoven's hearing had deteriorated to such a degree. By 1814 his deafness must have been quite severe; this can be gathered from the remarks made by his contemporary Spohr,[4] on Beethoven's public performance on the piano. "It was no pleasure. To begin with, the piano was badly tuned, which hardly troubled Beethoven for he could not hear it anyhow, and secondly, as

a result of his deafness there was but little left of his skill that was once so greatly admired. At *forte* the poor man was so heavy, that the chords rattled, and at *piano* he played so softly, that whole groups of notes were left out." It was from 1814 that he depended on those writing books of which a great many exist, and no less than 138 are to be found in the National Museum of Berlin. He always carried one about with him. But though his deafness was now so severe he still persisted in conducting. He conducted as late as 1822, but with ever decreasing success. His friends were in fear that sooner or later it would end in a painful fiasco, such as in fact did occur in the latter year. Shindler's[5] account of it is moving in its simplicity.

". . . Beethoven insisted on conducting the rehearsal [of Fidelio]. . . . From the duetto of the first Act, it was evident that he heard nothing of what was passing on the stage. He slowed the movement considerably, and whilst the orchestra followed his baton, the singers kept to their proper time. A general confusion resulted . . . Umflauf proposed an interval, without giving any reason; then after a few words with the singers, the performance went on. But the same chaos came about again. Another pause was necessary. The impossibility of continuing under Beethoven's guidance became evident; but how could one convey that to him? No one had the heart to say to him: 'Withdraw, you poor man, you cannot conduct.'

"Beethoven, uneasy and agitated, was looking around trying to read in the faces of people the cause of the obstacle; there was silence everywhere. Then he called me over brusquely, and giving me his writing-pad he made me write. I wrote: 'I ask you not to continue; I'll explain why at home.' In one movement he jumped down calling to me to follow him. He ran in one breath to his house: entering, he threw himself on the sofa, covering his face with his hands, remaining in this attitude till dinner. At the table it was impossible to get a word out of him: he had an expression of collapse and of the deepest sorrow. After dinner, when I wanted to leave him, he kept me back begging me not to leave him alone.

"When I was about to leave him, he asked me to accompany him to his doctor, who had a great reputation for his treatment of ear conditions. . . . In all my future dealings with Beethoven, I have never known a day that could be compared to this fatal day of November. . . . He was stricken to the

root of his being, and until the very end, he lived under the shadow of this terrible event."

In between 1814 and 1822 his hearing seems to have been progressively deteriorating. There is the evidence of Czerny [25] that in 1816 Beethoven could still carry on a conversation by the aid of the speaking-tubes made for him by Maelzar, but that a year later he could no longer hear music. It was in this year that Maelzar made a special apparatus for him to help him to continue his activities as a conductor. By 1818, according to Shindler,[5] conversation, even with the help of speaking-tubes, had become impossible. In 1819, he is spoken of as totally deaf, by Zeltzer,[25] who writes to that effect to Goethe, and by Atterbohm.[25] ("He is now what is called stone-deaf.")

This is borne out by the scene at the first public performance of the Ninth Symphony in 1824. At the conclusion of the performance the audience broke out in a tumultuous applause. But Beethoven, whose back was turned to the cheering crowd, was unaware of it till one of the singers made him turn round. There is also the evidence of Gerhard von Breuning [6] that in 1825 or 1826 Beethoven did not hear him enter his room and producing noises by striking musical instruments; he was certainly deaf for all practical purposes, though doubt as to total deafness is thrown by the following remark of von Breuning.[6]

"At the table one of my sisters once uttered a loud and shrill scream ("einen gellenden hohen Schrei"). Beethoven apparently heard it, and this made him so happy that he laughed whole-heartedly, so disclosing two rows of his blinding white teeth."

Total or subtotal deafness was therefore the condition of Beethoven towards the end of his life. Apart from the chronology of his developing deafness the following points of subjective interest are also worth noting.

1. In the incipient stages of his deafness, Beethoven lost his hearing for high notes. He records this in his letter to Wegeler, dated 29th June 1801: "If I am some little distance away, I cannot hear the high notes of voices and of instruments."

2. Earlier in life Beethoven claims to have had more perfect hearing than almost any other musician (Heiligenstadt will, 1802).

3. In 1809, the French shelled Vienna. Ries reports that Beethoven went to his cellar and covered his head with pillows in order not to hear the shelling. According to Wegeler, these noises were painful to Beethoven's ears (Wegeler and Ries).

4. The one mention of pain by Beethoven occurs in 1822, when he writes in February: "Last night I was again attacked by earache from which I generally suffer at this season of the year."

2. Beethoven's General Condition.

It is necessary to review briefly such data as are available concerning Beethoven's general condition, for the light they may throw on the origin and course of his deafness.

Beethoven, though possessed of great vitality, had chronic ill-health. There is evidence that in his childhood he had an attack of smallpox; most of his biographers say that his face had marks bearing permanent witness to this affection. Of more doubtful value is the evidence of Dr Weisenbach,[7] who wrote in 1814 that Beethoven had at one time "typhus," and that his deafness dates from that time, his nervous system having broken down. ("Verfall Seines Nerven system.") The earliest evidence to be gathered from Beethoven's letters is that to be found in a letter addressed to Schade[2] (1787), in which he relates how he had hastened back to his mother who was dying from phthisis. He speaks of his own troubles with "asthma," and of the fear that it might develop into phthisis. He is also worried by his depression of spirits "which is to me as great an evil as my illness." The evidence becomes more plentiful from 1800. In the letters to Amenda and Wegeler he speaks of intestinal trouble as something not new. He links up his deafness with the intestinal affection, and writes to Amenda that though the alimentary condition has improved by treatment, his deafness has remained uninfluenced. To Wegeler he writes of his "long-standing intestinal weakness," with its terrible colics, constant diarrhœa, leading to great prostration. In his subsequent letters complaints of diarrhœa and colicky pains keep on recurring. It would appear that he was hardly ever free from these troubles, though sometimes, and in 1812, he had particularly severe exacerbations.

Headaches of a severe type are first mentioned in a letter to

Gleichenstein in 1807.[2] They were apparently sufficiently severe and of sufficiently long duration to affect his work seriously. In 1811 he writes to the Archduke Rudolph: "For two weeks now I have again been afflicted with headaches. I have hoped till now they would become better, but in vain; my physician still gives me hope that they will improve with time." The letters of later years bear evidence that his physicians were wrong.

In a letter to Franz Brentano, in 1821,[2] he relates that "since last year till now, I have continually been ill; this summer, I had jaundice, which had persisted till the end of August. . . . Now things are better, and it seems to me that I shall again be able to live for my work . . . which has not been the case for the past two years." But things did not go better for long. In 1823 some trouble with his eyes,[31] probably conjunctivitis, was added to his many distractions. He spent most of his time in Baden; 1824-1825 seem to have been particularly bad years. In a letter,[2] written in 1825 to his medical adviser (Branhoffer), he relates of spitting up blood and of blood flowing from his nose, "a frequent occurrence in winter."

The jaundice of 1821 and the epistaxis of 1824-1825 seem to have been the prelude to the terminal illness which overtook him at the end of 1826. Starting acutely, with some pulmonary disturbance, according to Professor Wawruch[8] who attended on him, he became better only to develop jaundice, associated with diarrhœa and vomiting, so severe that in themselves they had threatened to kill the patient. The legs, which up till then had been only mildly swollen, become more swollen and ascites became established. Between the 9th December 1826 and the 27th February 1827, Beethoven was tapped four times for his ascites. On the first occasion 11 litres ($5\frac{1}{2}$ mass) and on the second, 20 litres (10 mass) were drawn off. Improvement was only temporary and the condition became progressively worse. On the 26th March 1827 he died whilst a storm was shaking Vienna.

He had received the sacraments on the 24th; when the priest had gone, Beethoven addressed himself to his friends standing at the bedside: "*Plaudite amici, comœdia finita est.*"

3. Post-mortem Findings.

Johan Wagner and his assistant Rokitansky carried out the post-mortem examination two days after Beethoven's death.

They also removed the petrous portions of both temporal bones[6] and placed them in the Anatomical Museum in Vienna. But when later on it was desired to study these bones in detail, the specimens had disappeared.

The findings given in the post-mortem report are of considerable significance and deserve quotation in full[9]:—

The cadaver, and especially the limbs, was very wasted and covered with black petechiæ; the abdomen very much swollen and tense with water.

The auricular cartilage was large and irregularly formed; the scaphoid fossa, but particularly its conchal portion was very roomy and deeper by half the normal; the various projections and depressions were considerably exaggerated. The external auditory canal appeared to be lined with glistening cutaneous scales; this was especially marked near the concealed tympanic membrane. The Eustachian tube was very thickened and its mucosa rugose and rather narrowed at the bony part. At its pharyngeal opening, and near the tonsils, scarred depressions were to be seen. The mastoid process was large and not marked off by any groove; its cells were conspicuous and lined by a highly vascular mucosa. The whole of the petrous portion of the temporal bone, showing large vessels, was similarly well-supplied with blood, especially in the region of the cochlea, the spiral lamina of which seemed slightly reddish.

The facial nerves were of considerable thickness. The auditory nerves on the other hand seemed shrunken and without pith; the accompanying arteries were of the calibre of a crow-quill, and of cartilaginous consistency. The left auditory nerve, much the thinner, arose by three very thin, greyish roots; the right by one root, stronger and pale white; the superficial substance surrounding the fourth ventricle was much denser in consistency and more vascular than these nerves which arose from it. The brain was softer and more watery than normal, and the convolutions appeared to be twice as deep and more numerous than usual. The vault of the skull was markedly and uniformly dense and about half an inch thick.

The thoracic cavity, and its contents, were normal.

The abdominal cavity contained four mass (8 litres) of turbid, greyish-brown fluid. The liver appeared shrunken to half its size, leathery in consistency, and greyish-blue in colour; its tuberculated superficial surface and its cut surface was full of knotted masses of the size of a bean; all the vessels were very contracted, thickened and devoid of blood.

The bile was a darkish-brown fluid, containing a gritty sediment. The spleen was twice its normal size, blackish in colour, and tough; similarly, the pancreas was large and firm, and its duct was the

width of a grey quill. The stomach and the intestines were very distended with gas.

Both kidneys were contained in a cellular membrane, one inch in thickness, dripping a turbid brownish fluid, its structure was loose, and pale red in colour; each calyx contained a chalky deposit, wart-like in shape, and similar to a pea cut across.

4. Exhumations.

Beethoven was exhumed twice, once in 1863,[11, 12, 14] and a second time in 1888.[13] On both occasions the remains of the skeleton were carefully investigated. It was found on the first occasion that the skull had crumbled into nine pieces. To Gerhard von Breuning it was a labour of love to piece these fragments together, and to attempt some reconstruction of these bones.[15] The fragments, as pieced together, were photographed by Rottmayer, and a copy of this photograph is at the Beethoven Museum in Bonn.[15] The sculptor, Alois Wittman, was charged with modelling a reconstruction of the skull.[14] This reconstruction rests in the Anatomical Museum in Vienna. A cast of the base of the skull was also taken at the time (by Seligmann).[13, 15] At the second exhumation in 1888 Dr Choulant made drawings of the skull reconstructed once more.[15] These drawings, showing front, back and side views, are also to be found in the Beethoven Museum at Bonn.

A good deal of controversy has raged around the photograph taken by Rottmayer. This shows a distinct bulge over the right parietal bone. No such bulge is shown in the masks of Beethoven taken during life, and on his death. The post-mortem report speaks of the uniform thickness of the vault of the skull. The careful description of the fragments disinterred in 1888, when they were in very much the same condition as in 1863, makes no mention of any irregularity in the bones, and Choulant's drawings do not show it. The bulge in the Rottmayer photography—and enlargements based on it—is, therefore, regarded as an artifact, probably a piece of clay attached to the bones. The evidence for regarding the bulge as genuine is mainly an unpublished sketch spoken of by Jacobsohn,[27, 28] which is supposed to be a drawing of the fresh skull, and which is said to show this swelling of the right parietal bone.

5. The Type and Nature of Beethoven's Deafness.

(*a*) **The Type of Deafness.**—At the age of 31 Beethoven first speaks of his deafness, and refers to it having troubled him for some three years. We have his own evidence that it could hardly have been very severe at that time, and even a year later when he felt his position so keenly as to write his Heiligenstadt will, his deafness was essentially only a reduction of the auditory field, for his complaint is that he failed to hear a shepherd in the distance playing a flute. Beethoven also relates that before the onset of his deafness, he had exceptionally keen hearing. All this taken together with the reference in the Fischhoff manuscript, which dates the beginning of his trouble to his twenty-sixth year of life, lead to the strong probability that the auditory disturbances did indeed first become apparent when Beethoven was 26, as he himself states in the Heiligenstadt will. The very fact that Beethoven's psychological reaction in 1802 was so very violent, may perhaps be taken as some indication of the fact that his deafness had not been developing insidiously since childhood but was of a fairly recent origin. We are, therefore, dealing with a type of deafness that beginning between 20 and 30 is mercilessly progressive, leading to practically total deafness by the age of 45 (at 44, in 1814, Beethoven took to his "conversation books").

It is unlikely that the deafness was of the middle-ear type. There is no history of any discharge or any complaints later on of acute exacerbations, such as one is likely to get during the course of a progressive and active chronic middle-ear disease. Moreover, a middle-ear condition of such severity is not infrequently associated with vestibular symptoms, such as giddiness. Of this there is no evidence in Beethoven's history. Beethoven speaks of loss of notes of high pitch in the early stage of his deafness; this is unlike middle-ear disease, in which both high and low pitch are lost, the most preserved being the middle-scale. Moreover, both the negative and positive findings in the post-mortem examination exclude the possibility of middle-ear disease; no reference is made to any perforation in the drum; if this were present it could hardly have been overlooked in the painstaking examination conducted by Wagner and Rokitansky. The post-mortem findings on the Eustachian tubes exclude any severe lesion in that region.

The presence in the mastoid process of "conspicuous air-cells lined by a highly vascular mucosa," is final and conclusive evidence against the chronic suppurative variety of middle-ear diseases, though it does not exclude the possibility of the chronic adhesive type. The only support for the diagnosis of middle-ear deafness is the observation reported by Rattel in Gelineau's book *Hygiène de l'oreille et des sourds*, p. 162, and quoted by Klotz-Forest[18] to the effect that when Beethoven became completely deaf, he used the wooden drum-stick (*baguette de bois*) to hear the piano when he was composing—"one extremity he applied to the frame of the piano and the other he held between his teeth." This is important evidence, if true, and it is rather curious that such an unusual mode of listening to the piano should have escaped notice by the many contemporary biographers of Beethoven. The original report of Rattel's observations has unfortunately been inaccessible to the present writer, and it is therefore difficult to assess its value, or to know whether it is a first-hand observation, or hearsay evidence. The absence of any history of pain in the course of the development of his deafness is further evidence against middle-ear disease, though the reference in February 1822 to earache "from which I generally suffer at this season of the year," is rather puzzling.

Rather more evidence can be brought forward for otosclerosis. The course of the deafness suggests this affection, though of course progressive deafness may be associated with the other varieties. Beethoven's complaints of noises in the ears have been advanced by some as evidence in support of otosclerosis, but again this distressing symptom may be present with any other variety of deafness. Against otosclerosis it may be urged that in the post-mortem examination the cochlea was inspected; to have done so the region of stapes must have been looked at and bony fixation of the stapes could hardly have escaped observation. The absence of vestibular symptoms, so commonly present in otosclerosis, is also noteworthy. Further evidence against otosclerosis is the fact that apparently Beethoven's deafness was not of a familiar type; his brother and cousins seem to have been normal; it must, however, be admitted that very little is known of his mother and her relatives, a point of considerable importance in the diagnosis of otosclerosis, where inheritance is so often transmitted through the female.

Nerve-deafness first manifests itself by loss of high-pitched tones, and this is what appears to have happened in Beethoven's case. But the diagnosis of nerve-deafness, strongly supported by the post-mortem findings as to the nerves being "shrunken and without pith," has to overcome the difficulty that this type of deafness is not usually progressive; whatever damage is done is permanent, neither diminishing nor increasing with time. It is of course true that the original exciting cause of the nerve affection may persist and produce a chronic progressive lesion; and this may possibly have been the case with Beethoven, who all his life suffered from gastro-intestinal disturbances, with periodic attacks of diarrhœa. If it was indeed nerve-deafness from which Beethoven was suffering, it is worth while noting that it was not the particular clear-cut type seen with syphilitic lesions. There was certainly no sudden onset, as is commonly seen in syphilis; nor the quickly total deafness or sudden total deafness as not infrequently occurs. There is nothing in the history to suggest acute exacerbations with complete loss of hearing during the attacks; nor is there any history of giddiness, vomiting or nystagmus, all of which occur in this variety of lesion. Moreover, syphilitic nerve-deafness has a characteristic feature all of its own, in the loss early on not only of notes of high-pitch, but also those of low-pitch. (Siebenmann.)

It is not at all unlikely that Beethoven's deafness was of that indeterminate type so commonly seen in practice, a type that does not lend itself to any definite diagnosis, being a composite lesion of all possible affections leading to deafness. It is only necessary to point out the extreme difficulty that so many cases present in diagnosis, and that different reputable diagnosticians will regard one and the same case as being example of otosclerosis, chronic adhesive middle-ear catarrh, or nerve-deafness. Making a retrospective diagnosis on an incomplete history, on evidence collected at a time when otology in the modern sense was hardly existent, and the pathology of the ear barely perceived, it is, of course, impossible to come to any final conclusion. It can only be said, looking backward across the gulf of a century, that Beethoven's deafness presented no features that would put it in any specially clear-cut class such as familial deafness or the dramatic nerve-deafness of syphilis.

(*b*) **The Cause of Deafness.**—It is no more possible to establish the cause of Beethoven's deafness than it is in the

case of the majority of patients seen at the present day. Our knowledge of the pathology of deafness is still too obscure, and certainly insufficient to recover a secret from under the dust of a century. Speculations on the subject are none the less of some interest.

Beethoven and his contemporaries seemed to have been satisfied that they knew the cause of the deafness. Beethoven himself, according to the story of Charles Neate,[1] attributed the onset of his affliction to a fall. ". . . I fell on my hands. On getting up I found I was deaf, and have so remained since. The doctor said that there was an injury to a nerve." But this story of injury, implying a severe cranial lesion, finds no support in what is known of Beethoven's life. Besides, this cause advanced by Beethoven in 1815 is not at all what he considered to be the cause in 1801, when in his letter to Wegeler, to whom he writes about his failing hearing, he states that this must have been caused by "my long-standing intestinal weakness, which had become worse." As already noted, Weisenbach, writing in 1814, relates that Beethoven at one time (no definite date given) had typhus, and that the deafness dated from the convalescence of this illness. The Fischhoff document, already quoted, ascribed the deafness to an illness contracted as a result of a chill in 1796.

The post-mortem examination reveals no definite cause for the deafness, but many have attempted to link up the findings which show a marked cirrhosis of the liver, with the loss of hearing. The common ætiology is supposed to be syphilis.

The evidence for such a far-reaching suggestion is very feeble indeed. Theodor von Frimmel[21] and Leo Jacobsohn[20, 27, 28] are the chief protagonists for this view. They base their decision on the following arguments:—

1. Beethoven's deafness was of the otosclerotic type. This is commonly syphilitic in origin.

2. Beethoven had cirrhosis. This, too, is not infrequently syphilitic.

3. The association of both these conditions makes syphilis even more probable.

4. Von Frimmel[21] claims that it was common knowledge in Beethoven's time that the master had venereal disease. This claim is based on a personal communication (unpublished) said to be addressed by Thayer, Beethoven's biographer, to von Frimmel. Thayer in turn obtained his information not from documents but from conversation with people who knew Beethoven.

5. Jacobsohn[27] had access to a private collection (which cannot be published) in which there is a document in Beethoven's own writing, which shows "with a great probability that Beethoven was suffering from a certain disease." No further details of this document are given.

6. Friederich Schultze[29] speaks of prescriptions also only to be found in a private collection, and which cannot be published, which make the diagnosis of syphilis "undoubted." These prescriptions seem to have had a chequered career.

7. A deformity in Beethoven's skull is the last link of this chain. The belief in the genuineness of the deformity is based on the doubtful evidence of an unpublished sketch for which Jacobsohn vouches. But swellings of the skull are not necessarily syphilitic, and are by no means frequently due to acquired syphilis.

The circumstantial evidence is therefore hardly deserving of any serious attention and, even if it were proved that Beethoven had syphilis, there is nothing to prove that this was the cause of his deafness and of his cirrhosis.

There remains to consider whether the association of these two affections could indeed be ascribed to syphilis in Beethoven's case. It has already been shown that whatever else the deafness might have been due to, it was not a syphilitic nerve-deafness. Even the view that the deafness was otosclerotic in type gives no support for syphilis, for Jacobsohn is advancing an exploded fallacy in regarding syphilis as a very common cause of otosclerosis. Moreover, if syphilis caused the deafness somewhere at about 25, it followed a most unusual course in killing by cirrhosis of the liver at 57. Furthermore, cirrhosis of the liver of syphilitic origin is as questionable an entity as otosclerosis of syphilitic origin. There are quite enough causes in Beethoven's life for cirrhosis without having to call in a problematic syphilitic infection. We know that all his life he suffered from gastro-intestinal disturbances of severe type. That in itself is generally recognised to-day as being the precursor of cirrhosis; syphilis is certainly not a factor of primary importance in cirrhosis of the liver in adults, and alcoholism has lost the great significance that was once attached to it. To the modern clinician, Beethoven's gastro-intestinal disturbances would be enough to account for the cirrhosis coming on late in life, and, if an additional factor were necessary, the widespread habit of the age to indulge in beverages—a habit that Beethoven shared with his con-

temporaries—would supply it. Beethoven was certainly no drunkard—in spite of his very unfortunate family history—but there is evidence that in the last five years of life he indulged rather freely in spirituous drinks, and this may well have contributed to cirrhosis, which could have developed as a result of the many years of gastro-intestinal affliction. The association of deafness with cirrhosis does not lend the support to syphilis that Jacobsohn sees in this association; two distinct lesions, not due to the common exciting cause of syphilis, have been known before.

"Thee not carketh care nor slander,
Nothing but the small cold worm
Fretteth thine enshrouded form.
Let them rave.
Light and shadow for ever wander
O'er the green that folds thy grave.
Let them rave."

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